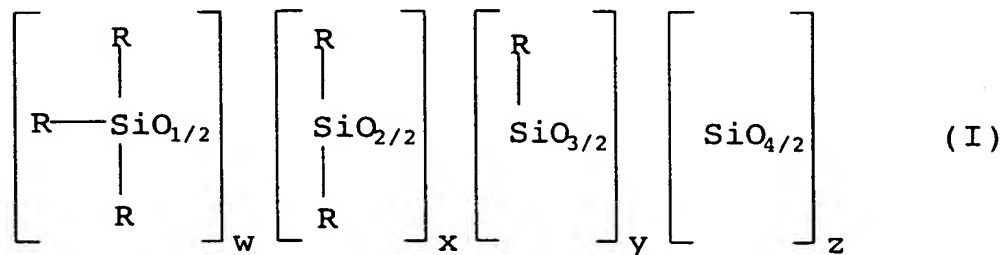


We claim:

1. An additive mixture comprising,
  - i) as component A, at least one polysiloxane antifoam and
  - ii) as component B, at least one partially or completely neutralized fatty acid, a long-chain carboxylic acid, an ester of such a carboxylic acid or a mixture comprising at least one of these compounds.
2. An additive mixture as claimed in claim 1, which comprises, as component A, at least one polysiloxane of the general formula I



where

the R radicals are each independently an R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup> or R<sup>5</sup> radical where

- R<sup>1</sup> is an aromatic or saturated aliphatic hydrocarbon radical,  
 R<sup>2</sup> is an organic polyol,  
 R<sup>3</sup> is a polyether radical,  
 R<sup>4</sup> is a phenol radical,  
 R<sup>5</sup> is an R<sup>2</sup> radical, except that some or all of the hydroxyl groups have been converted to diesters, diethers, acetals and/or ketals,

$$w = 2 + y + 2z,$$

y and z are each independently a number from 0 to 2 where the sum of y and z corresponds to a number from 0 to 2 and w + x + y + z = from 20 to 60.

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3. An additive mixture as claimed in claim 2, wherein, in component A,  
 $R^1$  is  $C_1$ - $C_{24}$ -alkyl,  $C_3$ - $C_{24}$ -cycloalkyl,  $C_4$ - $C_{24}$ -alkylcycloalkyl,  $C_6$ - $C_{10}$ -aryl or  $C_7$ - $C_{18}$ -arylalkyl,

$R^2$  is a saturated or unsaturated, branched or unbranched, aliphatic hydrocarbon radical which is substituted by at least two hydroxyl groups and is optionally interrupted by one or more oxygen atoms,

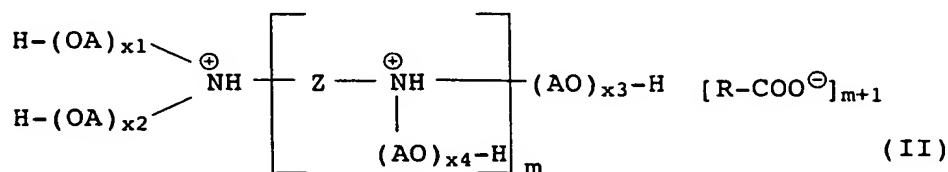
$R^3$  is a polyether radical which contains at least 50% by weight of copolymerized ethylene oxide units and has a molecular weight of up to 1500,

the quotient of the number of  $R^1$  groups to the number of  $R^2$  groups ( $R^1/R^2$ ) is from 3 to 19 and

the quotient of the sum of the number of  $R^3$ ,  $R^4$  and  $R^5$  groups to the number of  $R^2$  groups  $[(R^3+R^4+R^5)/R^2]$  is from 0 to 2.

4. An additive mixture as claimed in any of the preceding claims, wherein component B comprises at least one fatty acid neutralized by at least one amine.

5. An additive mixture as claimed in claim 4, wherein component B comprises at least one fatty acid salt of the formula II



where

$R$  is  $C_7$ - $C_{23}$ -alkyl or mono- or polyunsaturated  $C_7$ - $C_{23}$ -alkenyl, each of which are optionally substituted by one or more hydroxyl groups;

$A$  is  $C_2$ - $C_8$ -alkylene;

$Z$  is  $C_1$ - $C_8$ -alkylene,  $C_3$ - $C_8$ -cycloalkylene,  $C_6$ - $C_{12}$ -arylene or  $C_7$ - $C_{20}$ -arylalkylene;

$m$  is a number from 0 to 5; and

$x^1$ ,  $x^2$ ,  $x^3$  and  $x^4$  are each independently a number from 0 to 24,

and optionally at least one further fatty acid RCOOH where R is as defined above.

6. An additive mixture as claimed in any of claims 1 to 3, wherein component B comprises at least one saturated or unsaturated mono- or polycarboxylic acid having from 4 to 50 carbon atoms or at least one ester of such a carboxylic acid with a mono- or polyhydric alcohol having from 1 to 20 carbon atoms and from 1 to 8 hydroxyl groups.
7. An additive mixture as claimed in any of the preceding claims, wherein component A and component B are present in a weight ratio of from 1:200 to 1:10.
8. The use of an additive mixture as defined in any of the preceding claims for additizing fuel compositions.
9. The use as claimed in claim 8 for improving the antifoam performance of a fuel composition.
10. A fuel composition comprising a majority of a hydrocarbon fuel and an effective amount of an additive mixture as defined in any of claims 1 to 7, and optionally at least one further additive.
11. A fuel composition as claimed in claim 10 or the use as claimed in claim 8 or 9, wherein the fuel is diesel fuel, heating oil or kerosene.
12. A fuel composition or the use as claimed in claim 11, wherein the diesel fuel is one obtainable by refining, coal gasification or gas liquefaction, or a mixture thereof with renewable fuels.
13. An additive concentrate comprising an additive mixture as defined in any of claims 1 to 7 and at least one diluent and also optionally at least one further additive.

## Abstract

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ART 34 AND 1

The present invention relates to an additive mixture comprising  
5 at least one polysiloxane antifoam and at least one partially or  
completely neutralized fatty acid, and also to a fuel composition  
and an additive concentrate, each of which comprise this  
composition.

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